



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,828	10/29/2003	Hiroaki Sugiyama	12480-000023/US	2484
30593	7590	09/26/2006	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195			NGUYEN, JIMMY H	
			ART UNIT	PAPER NUMBER
			2629	

DATE MAILED: 09/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/694,828

Applicant(s)

SUGIYAMA ET AL.

Examiner

Jimmy H. Nguyen

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 2,6,9,12 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7,8,10,11,13,15 and 16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This Office Action is made in response to applicant's RESPONSE TO ELECTION REQUIREMENT AND AMENDMENT, filed on 08/02/2006.
2. Applicant's election without traverse of species II, as illustrated in figures 7-9 in the reply filed on 08/02/2006 is acknowledged.
3. Claims 2, 6, 9, 12 and 14 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species I as indicated by the applicant in the RESPONSE TO ELECTION REQUIREMENT, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 08/02/2006.

### ***Drawings***

4. Figure 10 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
5. The drawings are objected to because Fig. 7 includes "a TEST **COMAND** LIST" due to a typo. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should

not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Claim Objections***

6. Claim 1 is objected to because of the following informalities: “a test sequence and testing patterns” in line 5 should be changed to -- said test sequence and said testing patterns -- because there is sufficient antecedent basis for these limitations in the claim. Appropriate correction is required.
7. Claim 5 is objected to because of the following informalities: “mounted on” in line 1 should be changed to -- included in -- because a drive circuit of a display device is always disposed inside the display device. See Fig. 7. Appropriate correction is required.
8. Claims 11 and 16 are objected to because of the following informalities: “mounted on” in line 1 should be changed to -- included in -- because a recording medium of a display device is always disposed inside the display device. See Fig. 7. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 2629

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 4, 8, 10, 11, 13, 15 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claims 4, 8, 13 and 15, these claims recite a feature, “image information with **minimum unit**”. Since what it is meant by “minimum” is unclear, it is considered that the invention is not clearly defined.

As to claim 10, it is not clear that the invention of this claim is directed to a testing device or a display device, because the first two lines of claim 10 are directed to a testing device; however, the body of the claim recites all elements of a display device.

As to claims 11 and 16, it is not clear that the invention of these claims are directed to a recording medium or a display device, because the first two lines of these claims are directed to a recording medium; however, the body of the claim recites elements of a display device.

***Notice to Applicants***

11. Note that the cited disclosure of the cited reference(s) used in the below rejection(s) is merely at least one of plural places to support for the claimed feature. To fully understand the cited reference(s) regarding to the claimed feature(s), a read through the entire reference(s) is suggested to Applicant(s).

***Claim Rejections - 35 USC § 102***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

13. Claims 1, 3, 5, 7, 10, 11 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Braun (US 7,023,470 B2).

As to claims 1, 5, 11 and 16, Braun discloses a display device (100) (see Fig. 1) comprising nonvolatile storage means (a memory 111 such as a ROM, see Fig. 1, col. 3, lines 44-45) as a recording medium for storing a video display test program including a test sequence (program instructions and/or a diagnostic procedure) representing procedures for a display test and testing patterns to be displayed in a display test (see col. 3, lines 48-57); and interface means (a video receiver/encoder 113, see Fig. 1) for reading out a test sequence and testing patterns from the nonvolatile storage means in accordance with a test control signal supplied externally from the keypad and controlling display of the testing patterns in accordance with the test sequence (see col. 3, lines 29-32, col. 3, line 58 through col. 4, line 9).

As to claims 3 and 7, Braun discloses at that the keypad includes a number of keys or buttons for outputting test control signals including a number of different test commands to the video receiver/encoder 113 (see col. 3, lines 29-32 and col. 4, lines 1-9, and col. 5, lines 15-17),

Art Unit: 2629

and the video receiver/encoder 113, in response to the received test command, executes the test program or diagnostic procedure, converts the test patterns in proper format, and sends the converted test patterns signals to the video display screen (see col. 3, line 36 through col. 9).

Moreover, Braun discloses the video test program including many various types of test patterns, such as patterns testing for brightness, contrast, color fidelity, and etc. (see col. 3, line 48 through col. 5, line 6). Based on the mentioned disclosure, Braun implicitly discloses the video test program inherently comprising a test command list including execution codes respectively corresponding to test command, in order to execute the proper program instructions (codes) and to retrieve properly the test pattern corresponding to the test command from the keypad.

Accordingly, the Braun reference discloses all the limitations of these claims.

As to claim 10, since this claim recites similarly to claim 3, this claim is therefore rejected for the same reason set forth in claim 3 above.

***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 4, 8, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Braun, and further in view of Kim (US 5,671,011).

As to these claims, as discussed in the rejection above, Braun discloses the test pattern including image information regarding to the tested parameters (see col. 4, lines 10-65). Braun does not disclose the image information with minimum unit and by the test sequence, the image

Art Unit: 2629

information with minimum unit displayed at least one of longitudinally and laterally in repeating fashion, as presently claimed.

However, Kim discloses a related display device comprising a font memory (20) for storing testing pattern including image information (a minimum data, see col. 2, line 48) with a minimum unit (a unit picture, see col. 2, line 51), in order to minimize memory (see col. 2, lines 46-54). Further, Kim teaches that by the test sequence, the image information with minimum unit is displayed at least one of longitudinally (vertical axis direction) and laterally (horizontal axis direction) in repeating fashion (see col. 3, lines 13-28). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to form the Braun image information with minimum unit and to display the image information repeatedly in the horizontal axis direction and the vertical axis direction, in view of the teaching in the Kim reference, because this would reduce the size of the display memory, as taught by Kim (see col. 2, lines 46-50), thereby reducing the cost of the display device.

### ***Conclusion***

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kim (Us 5,963,249) discloses a related display device including a self-diagnostic circuit for performing a number of tests (see Abstract, Fig. 1, and the corresponding description).

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy H. Nguyen whose telephone number is 571-272-7675.

The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m..



Art Unit: 2629

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached at 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JHN  
September 25, 2006



Jimmy H. Nguyen  
Primary Examiner  
Technology Division: 2629